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10/583,563

06/19/2006

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EXAMINER

COOLEY, CHARLES E

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

10/05/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/583,563 | Applicant(s) KLAPPER ET AL. | |
| | Examiner Charles E. Cooley | Art Unit 1797 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060619</u> . | 6) <input type="checkbox"/> Other: _____ |

NON-FINAL OFFICE ACTION

1. **This application has been assigned to Technology Center 1700, Art Unit 1797 and the following will apply for this application:**

Please direct all written correspondence with the correct application serial number for this application to **Art Unit 1797**.

Telephone inquiries regarding this application should be directed to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197 or to the Examiner at (571) 272-1139. All official facsimiles should be transmitted to the centralized fax receiving number 571-273-8300.

Priority

2. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). All of the CERTIFIED copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

Information Disclosure Statement

3. Note the attached PTO-1449 form submitted with the Information Disclosure Statement filed 19 JUN 2006.

Drawings

4. The sheets of drawings filed on 19 JUN 2006 are objected to because replacement sheets corresponding to the annotated sheets are not present in the application. Replacement sheets corresponding to the annotated sheets are required.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES**Replacement Drawing Sheets**

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" (37 CFR 1.121(d)) and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

Specification

5. The substitute specification filed 19 JUN 2006 is approved.
6. The abstract is acceptable.
7. The title is acceptable.

Claim Rejections - 35 USC § 102

8. The terms used in this respect are given their broadest reasonable interpretation in their ordinary usage in context as they would be understood by one of ordinary skill in the art, in light of the written description in the specification, including the drawings, without reading into the claim any disclosed limitation or particular embodiment. See, e.g., *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004); *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000); *In re Morris*, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319, 321-22 (Fed. Cir. 1989).

The Examiner interprets claims as broadly as reasonable in view of the specification, but does not read limitations from the specification into a claim. *Elekta Instr. S.A.v.O.U.R. Sci. Int'l, Inc.*, 214 F.3d 1302, 1307 (Fed. Cir. 2000). "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. Inc. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987).

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 2, 4, 14, 15, and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Dahlstedt (US 2,628,023).

The patent to Dahlstedt discloses a method and a device having a separator drum 1 for processing milk, where a measuring and control device 3-7 is provided which determines a concentration of the fat content of an outflowing product phase from the separator (at 4) and when a defined or predetermined fat content limit value is reached or exceeded shifting a separation zone in a separator drum of the separator for a defined minimum time period by changing operating parameters obtained by throttling a valve 2. By throttling the valve 2, the separating zone in the separator drum is then shifted away for a certain period of time by consequently modifying the operating parameters which automatically and inherently prevents a blockage in the separator due to the increase in fat content above a known value. By means of the control of the fat content in the outflowing cream below a defined limiting value, a blockage is necessarily prevented and a threatened or potential blockage which also here is only known as a result of the determination of a fat content, is prevented by shifting the separating zone in the separator 1; wherein the fat-containing product is cold milk having an inlet to the drum at 1a and the cold milk is separated into cream (passing through an outlet proximate 4) and into skimmed milk (passing through an outlet proximate 3); wherein the separation zone in the drum 1 is shifted toward an interior of the drum when the fat content limit value has been one of reached and exceeded by throttling the valve 2; an analyzer 4 is arranged in the cream outlet by which analyzes the fat content of the

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cream; wherein the inlet proximate 1a extends from a bottom of the separator into a separator drum having a vertical axis of rotation as seen in the Figure. Relay 6, which controls the amount of time the valve 2 is throttled, is deemed equivalent to the recited timer

Claim Rejections - 35 USC § 103

11. The terms used in this respect are given their broadest reasonable interpretation in their ordinary usage in context as they would be understood by one of ordinary skill in the art, in light of the written description in the specification, including the drawings, without reading into the claim any disclosed limitation or particular embodiment. See, e.g., *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004); *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000); *In re Morris*, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319, 321-22 (Fed. Cir. 1989). The Examiner interprets claims as broadly as reasonable in view of the specification, but does not read limitations from the specification into a claim. *Elekta Instr. S.A.v.O.U.R. Sci. Int'l, Inc.*, 214 F.3d 1302, 1307 (Fed. Cir. 2000).

12. To determine whether subject matter would have been obvious, "the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the

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circumstances surrounding the origin of the subject matter sought to be patented."

Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17-18 (1966).

The Supreme Court has noted:

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.

KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1740-41 (2007). "Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." (Id. at 1742).

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claims 3 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlstedt (US 2,628,023) in view of Kjellgren (US 3,656,685).

Dahlstedt does not disclose the temperature range or fat content range. Kjellgren '685 discloses a method and apparatus for separating milk wherein the cold milk fed into the separator 1 has a temperature within the recited range and the separator separates the cold milk into cream having a fat content within the recited range (col. 1, lines 38-48). Since Kjellgren teaches that it is conventional to process milk within the recited temperature and fat content ranges, it would have been obvious and mere common sense to one having ordinary skill in the art, at the time applicant's invention was made, to have processed the milk in the method and apparatus of Dahlstedt within the recited temperature and fat content ranges to obtain a higher viscosity separated cream product of predetermined temperature and fat content (col. 1, lines 22-30 and lines 49-54).

16. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlstedt (US 2,628,023) in view of Zettier (US 6,468,574 B1).

Dahlstedt does not disclose the mass flow meter or density output. Zettier '574 discloses a method and apparatus for separating a milk product wherein the milk product 1 is fed into a separator 6 and wherein fat content evaluation is determined by

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an evaluation unit with a flowmeter 10 and a density output 11. It would have been obvious and mere common sense to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the method and apparatus of Dahlstedt with a flowmeter and density output as taught by Zettier for the purposes of providing a better fat content of the separated cream, to permit automatic regulation of the cream concentration, and to control a valve in the cream discharge line to control the volumetric flow and pressure in the discharge line (col. 1, lines 7-17 and lines 40-64; col. 2, lines 46-52; and claims 1-3).

17. Claims 7-8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlstedt (US 2,628,023) in view of GB 991500.

Dahlstedt discloses the analyzer 4 is connected with a control input of a throttling control valve 2 in the cream outlet for shifting the separation zone in the drum under control of a relay/timer 6 but does not disclose the valve in the skimmed milk outlet. GB 991500 discloses a separator wherein one of the outlets 37 of the separator 20 has a throttling valve. It would have been obvious and mere common sense to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the throttling valve of Dahlstedt on any of the outlets thereof for the purpose of varying the back pressure in said outlet to thereby shift the position of the separating zone in the separator (GB '500 at p. 3, lines 81-91).

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18. Claims 9-13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlstedt (US 2,628,023) in view of Gunnewig (US 4,755,165).

Dahlstedt does not disclose the separation zone being shifted by an increase of an inflow rate. Gunnewig discloses a separator wherein an inflow rate of a material into the separator 1 through an inflow device 11, 20 is increased for a period of time. It would have been obvious and mere common sense to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the method and apparatus of Dahlstedt with an inflow device for increasing an inflow rate of materials into the separator as taught by Gunnewig for the purpose of displacing the zone of separation within the separator to control the purity of the separated phases being discharged from the separator (col. 1, line 41 – col. 2, line 42 and col. 3, lines 21-44).

19. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlstedt (US 2,628,023) in view of Tenthoff (US 4,689,157).

Dahlstedt does not disclose the separator including a swirl space on a separating disk and a regulating disk having a diameter larger than a gripper chamber cover, which swirl disk, regulating disk and gripper chamber cover are arranged in a path to the skimmed milk outlet. Tenthoff discloses a separator 1 including a swirl space 9 on a separating disk and a regulating disk proximate 15 having a diameter larger than a gripper chamber cover 14, which swirl disk, regulating disk and gripper chamber cover are arranged in a path to the outlet 17. It would have been obvious and mere common sense to one having ordinary skill in the art, at the time applicant's invention was made,

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to have provided Dahlstedt with a swirl space on a separating disk and a regulating disk having a diameter larger than a gripper chamber cover, which swirl disk, regulating disk and gripper chamber cover are arranged in a path to the outlet as disclosed by Tenthoff for the purpose of controlling the discharge of separated liquid from the separator (col. 3, lines 29-35).

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley in Art Unit 1797 whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri.. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles E. Cooley/

Charles E. Cooley
Primary Examiner
Art Unit 1797

5 October 2009